What Is Claimed Is:

1. A control circuit for controlling an electronic circuit, which has a current path through a semiconductor switch (1) and a line; when the semiconductor switch (1) is switched, the inductance of the line and/or of a component in the current path produces an excess voltage between a first and a second current-carrying terminal of the semiconductor switch,
wherein the control circuit has a controllable current source (13) for charging or discharging a charge-controlled gate of the semiconductor switch (1) with the aid of a control current, as well as a control unit (12), the control unit (12) controlling the current source (13) in such a manner, that in the case of a switching operation, the terminal voltage across the current-carrying terminals of the semiconductor switch (1) does not exceed a predefined setpoint terminal voltage ($U_{DS,setpoint}$).

2. The control circuit as recited in Claim 1,
wherein the setpoint terminal voltage ($U_{DS,setpoint}$) is a function of the maximum permissible terminal voltage between the current-carrying terminals of the semiconductor switch (1).

3. The control circuit as recited in Claim 1 or 2,
wherein the control unit (12) has a comparator circuit for comparing the terminal voltage (U_{DS}) to the setpoint terminal voltage ($U_{DS,setpoint}$) and controlling the current source (13) as a function of the comparison result.

4. The control circuit as recited in Claim 3,
wherein the control unit (12) has a P controller for controlling the current source (13) in such a manner, that a change in the control current is proportional to the difference between the terminal voltage (U_{DS}) and the setpoint terminal voltage ($U_{DS,setpoint}$).

5. The control circuit as recited in one of Claims 1 through 4,
wherein in a circuit-breaking operation or a circuit-closing operation, the setpoint terminal voltage ($U_{DS,setpoint}$) is greater than the operating voltage applied to the current path.

6. The control circuit as recited in Claim 5,
wherein the control input of the semiconductor switch (1) is chargeable via the current source (13) to a potential that is lower than the lowest potential of the current path.

7. The control circuit as recited in one of Claims 1 through 6,
wherein in a circuit-closing operation, the control unit (12) initially adjusts the setpoint terminal voltage ($U_{DS,setpoint}$) to a first setpoint value, and then to a second setpoint value after expiration of a period of time, the second setpoint value being less than or equal to a low operating potential in the case of a self-blocking semiconductor switch (1), or greater than or equal to a high operating potential in the case of a self-conducting semiconductor switch (1).

8. The control circuit as recited in Claim 7,
wherein the first setpoint value is selected so that the semiconductor switch (1) operates in its active operating range.

9. The control circuit as recited in Claim 7 or 8,
wherein a delay element (24) is provided, in order to fix the period of time starting with the circuit-closing operation, the period of time at least corresponding to the time after which the circuit-closing operation is definitely ended.

10. The control circuit as recited in Claim 7 or 8,
wherein a timing unit is provided for setting the setpoint terminal voltage ($U_{DS,setpoint}$) as a function of a current characteristic and/or voltage characteristic in the current path.

11. The control circuit as recited in Claim 10,
wherein the semiconductor switch (1) has a field-effect transistor, the terminal voltage representing a drain-source voltage between a drain terminal (D) and a source terminal (S), and the control input representing the gate terminal (G).

12. The control circuit as recited in Claim 11,
wherein the period of time is determined by the start of a commutation and a maximum commutation period after the start of the circuit-closing operation, the start of commutation being determined in that the increase in the gate-source voltage (U_{GS})

between the gate terminal (G) and source terminal (S) is 0 for the first time after the start of the circuit-closing operation.

13. The control circuit as recited in Claim 11,
wherein the period of time is determined by the start of a commutation and a maximum commutation period after the start of the circuit-closing operation, the start of commutation being determined in that the drain-source voltage (U_{DS}) falls below a threshold potential, the threshold potential being between a maximum operating potential and the first setpoint voltage.

14. The control circuit as recited in Claim 11,
wherein the period of time is determined by the start of a commutation and a maximum commutation period after the start of the circuit-closing operation, the start of commutation being determined in that the control current falls below a threshold value for the first time after the start of the circuit-closing operation, the threshold value being between 0 V and a control-current setpoint value.

15. The control circuit as recited in one of Claims 1 through 10,
wherein the semiconductor switch has an IGBT component.

16. A method for controlling an electronic circuit, which has a current path through a semiconductor switch (1) and a line; when the semiconductor switch (1) is switched, the inductance of the line producing an excess voltage between a first and a second current-carrying terminal of the semiconductor switch (1),
wherein a gate of the semiconductor switch (1) is charged or discharged with the aid of a control current, the control current being controlled in such a manner that, in the case of a switching operation, the terminal voltage (U_{DS}) of the semiconductor switch (1) does not exceed a predefined setpoint terminal voltage ($U_{DS,setpoint}$).